

**AC-DC ADAPTER INTERFACE AND BATTERY CHARGER  
HAVING HIGH SPEED BATTERY CHARGER CURRENT FOLDBACK  
WHEN ADAPTER CURRENT DEMAND EXCEEDS PRESCRIBED LIMIT**

**ABSTRACT**

Using an overcurrent detector and one-shot, an AC-DC adapter interface and battery charging circuit is operative, in response to the total current being drawn from an AC-DC adapter exceeding a prescribed limit, to immediately reduce (e.g., interrupt) the supply of battery charging current for a prescribed interval, and thereafter allow the battery charging current to incrementally adjust to an acceptable level, while maintaining the total current drawn from the AC-DC adapter to less than the prescribed limit.